Susan Craft. Using Circulation Statistics and Faculty Surveys to Guide Collection Development at a Branch Academic Library. A Master's paper for the M.S. in L.S. degree. July, 2012. 32 pages. Advisor: Rebecca Vargha.

This master's paper will analyze the usage of a branch library collection in two different ways. First, it will collect and analyze circulation data recorded about the print monograph collection to learn more about how different sections of the library are being used as well as the circulation trends for certain types of items. Second, it will discuss how faculty members use the print monograph collection by analyzing the results of a survey given to faculty in the departments that the library serves.

It is suggested that circulation statistics and faculty surveys can be used to guide collection development to focus on areas of the collection that are most used or studied by faculty, particularly as print budgets are being cut and monograph collections are shrinking.

Headings:

Collection development (Libraries)

Academic libraries -- Circulation analysis

Academic libraries -- Relations with faculty & curriculum

USING CIRCULATION STATISTICS AND FACULTY SURVEYS TO GUIDE COLLECTION DEVELOPMENT AT A BRANCH ACADEMIC LIBRARY

by
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of the School of Information and Library Science
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Approved by:

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Introduction

The Natural Resources Library is a branch library on the North Carolina State University Campus. It has approximately 35,000 print monographs, which will serve as the main focus of this study. With the construction of the new James B. Hunt Library on Centennial Campus, there is an opportunity for the branch libraries to send some of their volumes to D.H. Hill Library, which will be sending a large amount of volumes to the automated book retrieval system in Hunt Library. This weeding project was an ideal setting to study collection development and management at the Natural Resources Library. Circulation statistics were easily accessible, and by going through the material in the library as part of the weeding project, the author was able to become knowledgeable about the collection and the departments it served.

To carry out the weeding project, a list of all the books at the Natural Resources Library that have not circulated within the past ten years was created. Books on this list were either sent to Hill, or, if they were deemed important to the branch, kept at the Natural Resources Library. A large percentage of the books on the list were in fact sent to Hill. This list also provided a lot of insight into the print monograph collection at the Natural Resources Library. In addition to this list, another list showing circulation statistics for books acquired in the past ten years was also created. Together, these lists were analyzed and used along with a faculty survey to better understand how the print monograph collection was being used.

As budgets are being cut because of decreasing collection usage, it is becoming more important to focus on developing areas of the collection that are being used:

> "As Laura Kane explains, "With the information explosion in the twentieth century, it has become evident that libraries are no longer capable of purchasing or 'collecting' the vast amount of materials that would satisfy all the information needs of every patron." Not only is the volume of information increasing, Kane notes, but costs are spiraling upward at the same time that budgets are being either frozen or reduced. These trends have had a profound impact on what libraries can afford to own and how they are using their budgets." (Mortimer 2006).

Budget changes are forcing libraries to be even more thoughtful of what they purchase, especially in monograph collections, where overall usage is decreasing. Analyzing circulation statistics can give librarians a better sense of what parts of the collection are being used and what parts are not, and the faculty survey results can give more insight into the information needs of the departments as well as to the "why" questions that arise in analyzing the circulation statistics: "Why is the Geology section so popular?" "Why does the Forestry section appear to be underused?"

Most faculty surveys implemented by libraries focus on how often faculty use library services, not the collection. This study seeks to learn more about how the collection is used by the faculty. Do they search the online catalog to find what they need? Do they use the virtual browse feature of NCSU Libraries' website? Do they physically browse the collection? Do they mostly use books that they or colleagues already own? Knowing the answers to these questions could help libraries to understand more about what, if anything, would encourage the faculty to use the print collection more often, and how it could be developed in order to supplement their research.

After collecting the faculty responses for the survey, analyzing the circulation statistics, and reading the literature regarding circulation trends, it is hoped that some

standard guidelines that could help direct collection development in academic branch libraries could be formed. Collection development is a difficult task, and many librarians describe it as more of an art than a science. The purpose of this study is to make collection development an easier process, so that librarians can focus more on outreach, marketing, and library services, which the literature shows are becoming more important in academic libraries.

Literature Review

Circulation Statistics

There is a lot in the literature regarding "circulation statistics," ranging from how this term is used to how circulation statistics can be analyzed to what that reveals about a collection or about parts of a collection. Circulation data is used to keep track of how many times a book has been checked out. This information is important in letting a librarian know how much of the collection is being used in order to understand patron behavior as well as to direct collection development. Circulation data can also be helpful in finding the most used or unused sections of the library, indicating that a certain section of the library needs to be updated or showing how research in the different departments that use the library may have changed. However, there are some limitations with print circulation statistics. For example, for a print monograph to "circulate" it must be checked out. Statistics for in-house use of library materials are difficult to collect, and therefore not widely available. However, of the ARL Libraries that did keep in-house use statistics, they appear to be decreasing (Martell 2008).

Generally, around a third of the collection of an academic library has not circulated in the past fifteen years (Cheung 2011). A 1977 study found that 40 percent of the books and monographs had never circulated during the first seven years on the shelves (Galvin). A 2010 study found that 55% of the print monographs purchased by Cornell University Library since 1990 have never circulated and that only 35.5% of books purchased since 2001 had circulated for the first time (Cornell University Library

2010). Print circulation has been decreasing in academic libraries, although gate-count is increasing (Martell 2008). Galvin writes, "The hard facts are that research libraries invest very substantial funds to purchase books and journals that are rarely, or never, called for" (1977).

Literature shows that book circulation rises each year during the first five to seven years of a book's arrival in an academic library and stabilize after that period (Blecic 2000, Eldredge 1998). Additionally, books that are checked out in their first year tend to continue to be checked out, while books that are not checked out in the first or second year will still not be checked out after 15 years (Cheung).

It is assumed that a large reason for the decrease in print monographs is an increase in electronic resource usage. However, since electronic circulation statistics are not equivalent, the cost implications for each type of use is difficult to ascertain. As Martell writes, "it would be fascinating to know how many of one it takes to equal one of the other" (2008).

Circulation data can be used to gauge how well a marketing strategy is working in a library. If the library sets out a book display, the circulation can be recorded to show how much the display increases circulation. As circulation rates continue to decrease, more and more libraries are employing techniques such as these to make patrons more aware of the resources offered, thus encouraging more frequent use and justifying the cost of the resources (Jones 2011).

What can libraries to do increase the circulation of print monographs? While adding a cafe or computer lab may increase gate counts, they are unlikely to increase circulation (Martell 2008). In a study carried out at James Madison University, librarians

created a book display on the first floor to promote books from the third and fourth floor stacks, which, because of their location, were less likely to be browsed. They found that while 17% of books in the library circulated between April 2009 and April 2010, 27% of the books on display circulated (Jones 2011).

Why should libraries seek to increase the circulation of print monographs that they purchase? Cheung writes, "it is believed that the lack of use does not necessarily imply a lack of value." However, lack of use clearly affects the return on investment, as libraries consider return on investment to be directly related to the number of times an item is used. Talking with faculty and students, understanding their research needs, and marketing can help make users more aware of the resources offered, thus encouraging more frequent use and justifying the cost of the resources (Gupta 2006, Jones 2011).

Focusing on Subject Areas

Like most branch academic libraries, the Natural Resources Library serves a few specific departments on campus. Because of this, it would be helpful to understand trends in certain areas of the print collection. This information could show what parts of the collection are strongest and could also indicate what areas of the library are out of date or even what topics are outdated. The faculty survey will ask faculty about topics that they are currently researching to help with this question, and will also see which department uses the print collection the most and which department uses it the least. Instead of having to do a huge weeding project involving the entire library, there could be a focus on weeding a smaller part of the collection that has not circulated much in recent years.

Looking at specific subject areas is a methodology that has been used to analyze a library's collection, with Britten arguing that librarians should carefully analyze particular holdings of LC subclasses before making collection decisions (Mortimer). Additionally, it could be helpful to look at the type of item to see if there exists a relationship between type and usage. The faculty survey will ask what type of item faculty have most recently checked out, as well as what type of item they prefer in order to see if there is a trend. While it is expected that the most used resource is electronic journals, this will still be helpful in determining what type of print materials, if any, are preferred by faulty and can guide the library in making acquisition decisions.

Faculty Surveys for Collection Development

Regarding faculty use of libraries, literature shows that there is a contradiction between what faculty say is important and their actual behavior. For example, Barcley's article *The Myth of Browsing* points out that while faculty insist that browsing is an integral function of the library, circulation in academic libraries has declined by 14% from 1996 to 2004, while library "gate-count" increased by 17% during that same time period (Budd 2009; Martell 2008). This suggests that browsing print collections is not as important of a function of the library as some faculty and librarians believe, or that browsing is not directly linked to faculty finding and checking out an item that they find relevant to their interests.

There has not been much written regarding the use of faculty surveys to guide collection development. Most faculty surveys ask about use of or interest in particular library services (Hyrcaj 2007, Schonfeld 2010). Jensen (2009) focuses on engaging

faculty in collection development by distributing a list of potential acquisitions and allowing faculty to vote on them. However, a survey like the one included in this study could help a library understand more about how to address patron information needs through collection development.

Just In Time vs. Just In Case Collection Development

Recently, there has been a shift from "just in case" to "just in time" collection development. There are several reasons for this change, such as recent budget cuts and new technology that allows for increasingly convenient access. Like the term "circulation statistics," "just-in-time" encompasses a range of ideas and goals. For example, Mortimer writes, "In short, just-in-time acquisitions involves purchasing items re- quested through ILL rather than borrowing them from other libraries. Most just-in-time acquisitions programs involve purchasing requested items on an expedited basis" (2006). However, more recently, the "just in time" idea has begun to include user-driven models, such as pay-per-view (PPV), "which allow library patrons to access the content they need, without placing an undue financial burden on the institution. With PPV, access is available if needed by patrons" (Fisher 2012).

The idea of "just-in-time" acquisitions is used outside of the library world as well. Stores such as Wal-Mart, which have huge stores stocked with a large number of components have also begun to use technology which allows it to efficiently order supplies of the right component at the time when it is needed and at the place where it is needed. For example, if the weather forecast predicts rain for a certain store location, the store can then order an additional supply of umbrellas to place by registers. As Hanka

writes, “The emphasis has thus shifted from storage to distribution and delivery” (2000). This sentence also applies to the overarching driving force behind “just in time” acquisitions in libraries.

However, libraries cannot use interlibrary loan for every information need, and “ownership should remain a priority for academic libraries, as users will always require sufficient immediate access to certain information resources to merit paying for them up front” (Mortimer 2006). Libraries will still need to purchase material and make even more careful decisions regarding what to purchase versus what to borrow.

Using the pay-per-view method is also difficult because it makes it impossible for libraries to set a budget and stick to it. Faculty surveys could guide collection development on a yearly or bi-yearly basis, and would be another step in this type of “just-in-case” management without the budgetary uncertainty because the librarian ultimately has control over what is ordered.

Methodology

This study is a mixed-methods study involving both quantitative and qualitative methods. For the quantitative section, this study will collect and analyze circulation data. The data is collected by pulling a report that includes all items in the library that have not circulated in the past ten years using Sirsi. This data will be imported into an Excel spreadsheet. The data will then be separated by call number ranges to allow analysis to be done to determine the prevalence of certain subjects on this list. Considering that 12,750 books are on this list and that there are 35,000 books in the collection, about 36% of all books in the collection have not circulated in the past ten years. This number (36%) will be compared to the percentage of each subject areas that are on the list to see what subject areas have higher- or lower-than-average circulation.

The circulation data for items acquired in the past ten years will also be analyzed to see what types of items circulate often and what items have little to no circulation. This data will be compiled in a separate Excel spreadsheet and consists of 6,133 items. While literature also suggests using interlibrary loan statistics to determine collection and subject area usage, these statistics were not considered as significant for this study because, after interviewing the librarian, it was noted that most items that were being borrowed through ILL were owned by the library already, but were currently in use by another patron.

The second, qualitative part of the study will administer surveys to faculty in the four departments that use the Natural Resources Library: the Department of Forestry and

Environmental Resources, the Department of Parks, Recreation, and Tourism Management, the Department of Forest Biomaterials, and the Department of Marine, Earth, and Atmospheric Sciences.

To select faculty for the survey, ten names were chosen at random from each of the four corresponding departmental directories. These individuals were then sent an email with information regarding the study as well as a link to a survey with questions about how they used the print collection. After waiting a week, another ten names were chosen from each of the four departmental directories to receive more responses.

The questions in the survey were formed around the fact that this study aimed to learn more about how faculty use the print collection at the Natural Resources Library. Therefore, it included questions about frequency of checkouts and what type of item was checked out as well as frequency of browsing the print collection. The survey was created using SurveyMonkey and data was collected there and then manually imported into an Excel spreadsheet for sorting.

Results of Circulation Statistics Analysis

The researcher was provided with a spreadsheet containing information about items in the collection that have not circulated in ten years, which will be referred to as "NRL Weeding List." Additionally, to learn more about use of the print monograph collection, the author was provided with a spreadsheet with information about all books acquired by the Natural Resources Library since 2003, which is referred to as "NRL Item Analysis." Both of these reports were pulled using the Sirsi Circulation System.

The NRL Weeding List spreadsheet included about 12,750 items, which was about 36% of the collection. For the NRL Weeding List, the items were divided by call number, using a list of number of items in the branch by core LC range. The number of items on the sheet in that range were divided by the actual number of items in that range in the entire branch and the resulting number was compared to the overall 36% (approximately 12,750 books on weeding list divided by 35,000 total volumes in the library).

The second spreadsheet, NRL Item Analysis, also involved data regarding circulation, but it included different pieces of information, including total charges and date last charged. However, after obtaining this report, it appeared that some books had a date charged but listed 0 total charges. After communicating with staff in the Acquisitions department, it was revealed that some books have been charged to a library account called "INPROCESS," which leaves a date in the date charged column but does

not count as a charge. The spreadsheet was adjusted accordingly to control for this information.

For the NRL Item Analysis spreadsheet, the items were separated by call number, using the list called "Natural Resources Library: Library of Congress Call Number Guide," to find total number of items, total charges, and charges per item for each call number range.

After separating items and applying Excel formulas, it was possible to find areas of the collection with a particularly high or low percentage of books on the weeding list.

The areas with the highest percentage of books on the weeding list are the following:

Subject	**Call number range**	**Titles on weeding list**	**Total number of titles**	**Percentage of titles on list**
Forestry	SD	2815	7291	38.61%
Wood Technology	TS800-937	295	633	46.60%
Paper Manufacture	TS1080-1268	952	2054	46.35%

Geology has a much lower percentage:

Subject	**Call number range**	**Titles on weeding list**	**Total number of titles**	**Percentage of titles on list**
Geology	QE	288	3459	8.33%

The remaining categories have percentages ranging from 16.70% (GIS) to 28.98% (Recreation and Leisure).

For the NRL Item Analysis Spreadsheet, the highest and lowest circulating parts of the collection since 2003 were identified. The average charge per title for all items included in the spreadsheet was 2.42.

The highest circulating areas since 2003 are the following:

Subject	Number of titles	Total charges	Charges per Title
Chemical Technology	24	151	6.29
Manufactures	80	333	4.16
Geography	690	2470	3.58
Physical Geography	285	1018	3.57

The lowest circulating areas since 2003 are the following:

Subject	Number of titles	Total charges	Charges per Title
Aquaculture & Fisheries	72	52	0.72
Hunting	20	19	0.95

The data analysis shows that only 8.3% of the geology items in the NRL are even on the weeding list – this compares to around 30% as the average percentage of books in all selected call number ranges on the weeding list. However, according to the other spreadsheet analysis (NRL Item Analysis) for books acquired since 2003, Geology books have an average checkout per item of 1.91, which is lower than the average of 2.42. This could mean that most of the geology books are new, or it could mean that the geology books may just circulate at a fairly consistent, lower rate than other books.

Another interesting section is the Forestry (SD) section. It has a high appearance on the weeding list: 38% of items have not been checked out in the past 10 years - and

also the more recent books from 2003-present have an average checkout per item of 1.34, lower than the average of 2.42. Overall, this looks like a section that doesn't get as much circulation as other sections.

Another interesting section is the Paper Manufacture section because of its apparent discrepancy between the two spreadsheets: 46% of paper manufacture items are on the weeding list; however, the books in this call number range since 2003 have an average of 4.16 checkouts per item, which is much higher than the average 2.42. One hypothesis is that newer items in this section are very popular, but become out of date quickly and do not circulate much at all after this happens.

After collecting and analyzing these circulation statistics, the faculty survey was sent out with the hypothesis that responses could shed light onto certain areas of the collection by asking for specific research topics that faculty members are currently studying.

Results of Faculty Survey

Sixteen faculty members responded to the survey: of these participants, two were from the Department of Forestry and Environmental Resources, four were from the Department of Parks, Recreation and Tourism Management, two were from the Department of Forest Biomaterials, seven were from Marine, Earth, and Atmospheric Sciences, one identified with the Environmental Sciences Academic Program, and one respondent did not answer this question.

The survey was sent to twenty faculty members in each of the four departments, so the fact that eight of the sixteen respondents were from the Marine, Earth and Atmospheric Sciences Department implies that this department is more invested in the library. This is reinforced by the fact that four of the eight respondents in this department reported that they have checked out a book from the Natural Resources Library in the past month, with one having checked out a book in the past six months, two having checked out a book in the past year, and one responding that they had never checked out a book from the library. Four faculty members from the Parks, Recreation, and Tourism Management Department responded, with one having checked out a book in the past month, and three having checked out a book in the past six months. The Department of Forest Biomaterials and the Department of Forestry and Environmental Resources both had two faculty members respond: both faculty from the Department of Forest Biomaterials reported having checked out a book in the past month, however, while one faculty member from the Department of Forestry and Environmental Resources reported

having checked out a book in the past year, while the other reported having checked out a book more than a year ago. Only one respondent answered that he or she had never checked out a print book from the Natural Resources Library.

Unsurprisingly, most faculty members responded that online journals were their preferred resource, citing reasons such as convenience, ease of access, and relevance and currency of the content. Two faculty members responded that print journals were their preferred source because they contained material most relevant to their areas of study.

Of the books that had been checked out most recently, 83.3% were textbooks, 41.7% were reference books, 16.7% were conference or workshop proceedings, and 8.3% were government documents.

The survey also asked about browsing habits to better understand how faculty use the print collection. Additionally, it asked faculty where they heard about the item that they last checked out.

When was the last time you physically browsed the collection?

Response	**Frequency**	**Percentage**
never	1	6.3
more than a year ago	5	31.3
in the past year	2	12.5
in the past 6 months	3	18.8
in the past month	5	31.3

When was the last time you used the virtual browse feature on the NCSU Libraries website?

Response	Frequency	Percentage
never	5	31.3
more than a year ago	2	12.5
in the past year	1	6.3
in the past 6 months	2	12.5
in the past month	6	37.5

It appears that physically browsing the collection is still regularly done by faculty. Considering that 37.5% of the faculty used the virtual browse in the past month feature and 31.3% have never used it may imply that it is a popular tool for those who know about it, but there is still a significant proportion of faculty members who do not know about it and therefore do not use it at all. Since faculty responses suggest that convenience and literature citations guide their choice of resource, introducing faculty to the virtual browse feature may encourage them to look at print materials in a certain subject area more often from their computer.

In response to how they heard about the item they last checked out from the Natural Resources Library, four faculty members named citations in literature they were reading as what led them to a particular resource. Two named Google, two responded with the more general answer “online,” two responded that they had previously used the item, one named Web of Science, and one credited the library's "new acquisitions" shelf.

The faculty reported studying a wide range of topics. The eight faculty members in the Marine, Earth, and Atmospheric Sciences Department reported twenty-two different topics they were researching, including paleontology, biology, Appalachial plateau, educational psychology, reuse of southern yellow pine lumber, science

education, water pollution, gas, shale, hydrology, nitrogen and carbon cycling, and wildlife diseases. The Parks, Recreation and Tourism Management had the most overlap, with four faculty members listing five topics, with two listing obesity and physical activity; other topics of interest were urban forests and greenspace and health disparities. For the Department of Forestry and Environmental Resources, topics of interest included recycling, northern and southern Appalachian geology, composting, components of colloidal charge demand in the process water of paper mills, and the use of cellulosic materials as biosorbants to collect toxic substances for Forest Biomaterials and geology, evolution of higher plants, xylem structure and function and lignin biosynthesis.

It's also interesting to note the overlap between departments on some topics of study – Appalachian geology and recycling and reuse were topics in both Marine Earth and Atmospheric Sciences as well as Forest Biomaterials. Additionally, both Marine Earth and Atmospheric Sciences and Forestry and Environmental Resources faculty members were interested in biology and plant topics.

Conclusion

In general, the circulation statistics matched what would expect in an academic library. First, a little over a third of the collection was on the weeding list. While Cheung (2011) used a fifteen year interval and this study used a ten-year interval, this is close to what was expected for overall circulation. Also, from the NRL Item Analysis spreadsheet, it appears that overall circulation rates for print monographs in the Natural Resources Library have decreased since 2002. Since this study did not deal with electronic books, it is beyond the scope of this project to determine if their circulation has increased or decreased in that same amount of time. According to the literature, there is an assumption that the circulation rates of electronic books have increased and that has affected monograph circulation, as it has in similar libraries (Martell 2008). This would also be implied from the fact that the majority of faculty responding that electronic journals are their preferred resource.

The results show that currently, the geology section of the library is the most frequently used section in the library, and it is also the section with the least unused materials. The sections that include materials on chemical and paper technology and paper manufacturing have high charge out rates per title since 2003, but they also have a high percentage of titles on the Weeding List. This implies that while there is a strong collection in this area, there is also a need to weed some of the older items in this area as well.

Looking at the NRL Item Analysis spreadsheet, it appears that textbooks circulate most often, particularly in the first five to ten years after they are acquired. This matches with the faculty responses that indicate that textbooks are the library items they would most likely check out.

In addition to Geology, other call number ranges that had a low percentage of items on the Weeding List included oceanography and meteorology and climatology. In addition items in the oceanography section had a fairly high charge per title (2.72, higher than the average 2.42). These sections would fit most logically into the Marine, Earth, and Atmospheric Sciences Department, the department that uses the Natural Resources Library most frequently according to the survey.

While a high percentage of items in the paper manufacture and wood technology sections appear on the weeding list, chemical technology and manufacturing have a high charge-per-title. This caused the author to ask: What are professors in the Forest Biomaterials Department and Forestry and Environmental Resources Department studying? Their responses on the survey mostly included the general topics of geology, recycling and composting, plant biology, and chemical technology (the use of cellulosic materials as biosorbants [sic] to collect toxic heavy metals and pesticides). This could help to explain the usage patterns in the subject areas that appear to correspond to forestry topics.

Suggestions for Collection Development

The results of this survey and circulation analysis show certain parts of the collection that are being used often and parts that are not being used. This can allow

librarians to focus on developing parts of the collection for departments that are not using print materials as often.

Additionally, the results of the survey can show faculty members' preferences regarding certain types of items as well as certain topics that are currently being researched. This information can be used by librarians when ordering new materials for the library. It would be useful to ask faculty to complete a similar survey every eighteen to twenty-four months to keep up with trends in research and to see if, by focusing on one area of the collection, the library is attracting more faculty members in certain departments.

Using a faculty survey to guide collection development could be another step towards libraries using a "just in time" collection development mentality while still allowing the librarian to have control over the budget, unlike the pay per view system. It would also allow the library to have ownership over the desired materials, unlike other "just in time" models that only provide access to the materials through interlibrary loan or a similar borrowing method.

Finding the percentage of items in certain call number ranges that have not circulated in a certain number of years could direct the librarian to a smaller part of the library to focus on, rather than carrying out a large weeding project of the entire library at one time. Focusing on one smaller part of the collection rather than the entire library can save libraries time and money, and would make the overall project of collection development seem more manageable.

To increase print monograph circulation, libraries can try placing new books in a prominent location in the library. One faculty member did respond that he or she checked

out a book after seeing it on the new books display in the Natural Resources Library. In addition to new acquisitions, libraries can also display books from the stacks, which, because of their location, may not be easy to browse. Jones (2011) showed that the same books are more likely to circulate while on display instead of in the stacks.

As the literature review in this paper indicates, there are many statistics and qualitative data a library can use when making acquisition decisions. Each library is different and must decide what information is most important for its situation. Mortimer recognizes that mistakes will be made and librarians will have to compromise because "users will be served less well than if their institutions could afford to own every information-bearing entity known to humankind. However, if collection management policies cannot be perfect, they can at least be better" (2006). Using circulation statistics and faculty surveys can make collection development more manageable and focused on relevant sections of the library as well as on the actual information needs of patrons.

Appendix I: Faculty Survey Questionnaire

1. When was the last time you checked out a print book from the NRL?
    a. never
    b. more than a year ago
    c. in the past year
    d. in the past 6 months
    e. in the past month

2. What type of book did you check out?
    a. textbook
    b. conference proceedings
    c. reference book
    d. report
    e. government document
    f. other: please list: _____

3. How did you find this particular item?

4. When was the last time you physically browsed the print collection at the NRL?
    a. never
    b. more than a year ago
    c. in the past year
    d. in the past 6 months
    e. in the past month

5. When was the last time you used the virtual browse feature in the online catalog?
    a. never
    b. more than a year ago
    c. in the past year
    d. in the past 6 months
    e. in the past month

6. What type of resource do you most often consult/prefer?
    a. print book
    b. print journal
    c. online journal
    d. e-book
    e. other: please list: _____

7. Why do you prefer this particular type of resource?

8. What are some examples of topics you have been researching lately?

7. Which department are you associated with?

a. Department of Forestry and Environmental Resources
b. Department of Parks, Recreation, and Tourism Management
c. Department of Forest Biomaterials
d. Marine, Earth, and Atmospheric Sciences

Appendix II: Recruitment Email

Dear faculty member,

My name is Susan Craft and I am a graduate student at the University of North Carolina at Chapel Hill. I am conducting a research study, in partial fulfillment of my degree requirements, to learn more about faculty usage of the print collection at the Natural Resources Library. Our findings will be used to direct collection development with the goal of improving the overall collection to better suit the needs of faculty.

The survey, which will ask you questions about your use of the library collection, should take 5 to 10 minutes of your time and is voluntary. You may stop taking the survey at anytime, and you may skip any question for any reason. The benefits to you from being in this study may be that the library is better able to suit your research needs. All possible measures have been taken to protect the confidentiality of your answers.

I will report only summaries of the aggregated data. This means that your responses will be combined with all of the other responses received and will not be able to be identified as yours. Deductive disclosure which is the discerning of an individual respondent's identity and responses through the use of known characteristics of that individual is also possible but unlikely.

If you have any questions regarding this survey, you may contact me via email at smcraft@live.unc.edu or by phone at 662-230-1150.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have any questions or concerns regarding your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at (919) 966-3113 or via email at IRB_subjects@unc.edu.

By clicking ***here*** [live link] and completing the survey, you agree to be a participant in this study. By answering this questionnaire you agree to have your responses included in the study. All questions may be filled out on a voluntary basis, and you are not required to answer all questions. If you wish to be excluded from this study, do not fill out this survey.

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